Abstract of the Disclosure

A channel allocation method of channels having different transmission speeds in a wavelength division multiplexing (WDM) system is provided. The channel allocation method in a multirate optical transmission system includes

5   selecting a channel having the lowest transmission speed from not allotted channels, allotting the selected channel to the longest wavelength band of empty wavelength bands, and determining whether not allotted channels exist in order to repeatedly perform selecting the channel having the lowest transmission speed from the not allotted channels and allotting the selected channel to the longest

10   wavelength band of the empty wavelength bands, until all the channels are allotted.